

MARKED UP VERSION

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genomic DNA was similarly performed, using 200 ng of genomic DNA instead of first strand cDNA.

VI. Comparison of expression levels by semi-quantitative RT-PCR

To compare the expression of individual genes, RT-PCR was performed using primer pairs designed based on the sequence of the cDNA clones that was included on the GeneFilter. The PCR was done from 25 to 40 cycles with increments of 5-cycles, except for β_2 -microglobulin, which was done at 18, 22, 25, and 30 cycles. The PCR reaction products were analyzed on a 3% agarose gel stained with ethidium bromide, and the amount of DNA was quantitated as band intensities using GelDoc software from BioRAD (Hercules, CA). The level of expression of each gene was normalized against the level of β_2 -microglobulin expression between these two species. The relative expression between human and baboon cDNA was estimated by measuring the ratio of intensity of DNA product, comparing only those measurements which fell within the linear range of PCR amplification cycles; multiple determinations, when performed, were averaged. The sequences of Forward (F) and Reverse (R) primers are: Transmembrane 4 superfamily member 4 (TM4SF4), F-AAGCGATTTGCGATGTTACCTC --(SEQ ID NO: 1)--, R-GAGGCTCTCGGCACTTGTTCC --(SEQ ID NO: 2)--; Protein tyrosine kinase 9 (PTK9), F-GATTCCTTTGTTTTACCCCTGTTGGAG --(SEQ ID NO: 3)--, R-TTGCTGC ATACAACATTTTTTGAC --(SEQ ID NO: 4)--; Cytochrome P450, subfamily I (dioxin-inducible), polypeptide 1 (glaucoma 3, primary infantile) (CYP1B1), F-GTAATGGTGTCCCAGTATAA GTAATGAG-3'--(SEQ ID NO: 5)--, R-TCATGAATGCTTTTAGTGTGTGC-3'--(SEQ ID NO: 6)--; Colony stimulating factor 3 receptor (granulocyte) (CSF3R), F-CTGAAGTTATAGGAAACAAGC ACAAAGGC --(SEQ ID NO: 7)--, R- GCCC ATGACTAAAACTACCCCAGC --(SEQ ID NO: 8)--; Beta-2-microglobulin (B2M), F- CCTGAATTGCTA TGTGTCTGGG --(SEQ ID NO: 9)--, R- TGATGCTGCTTACATGTCTCGA --(SEQ ID NO: 10)--.

R82595, F : GCTCGTAGCAACATTTTCGTAATAGCC --(SEQ ID NO: 11)--, R : GGACCCATCGTGGTT ACCGTG --(SEQ ID NO: 12)--; AA676327, F- ATATTTTCGGTAACTTTTGACCCTAAG --(SEQ ID NO: 13)--, R: CAGGGGCAA TTTTGAGGTATG --(SEQ ID NO: 14)--; R85439, F:

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GGCAGGGCTCTAAATGGAAGTAGTTG --(SEQ ID NO: 15)--, R: CTCAG
AAGTGTTTTGTAGCAAGGCTGC --(SEQ ID NO: 16)--, AA487912, F:
AAACAGTGACTTATCCCGCTAC CC --(SEQ ID NO: 17)--, R:
GGGTGGGTTTACTCTTAGAATCGC --(SEQ ID NO: 18)--; N25920, F:
5 CAGATGGAGGGTTTATG AGTGAGGCTGG --(SEQ ID NO: 19)--, R:
GCTTGTTCTTTGGGGATTGTGGTGC --(SEQ ID NO: 20)--; R05886, F: TAGGCG
TGAGAAGCATATAGAGGC --(SEQ ID NO: 21)--, R: AGTGAATAAGCAAGAAATCAGGGTG
--(SEQ ID NO: 22)--; N74363, F: ACAAAGGGCTGTTTACTGAGAGACCTGAGC
--(SEQ ID NO: 23)--, R: GGCATAACTCACACCCATT TGTTTACCTGC --(SEQ
10 ID NO: 24)--; N55359, F: GGCAGAATCTACTGGGCATCTTGTAATC --(SEQ ID
NO: 25)--,
R: AGTTTTGGTGGTCCAGGGAAGGTAC --(SEQ ID NO: 26)--.